LMA District Cover Sheet

Spring 2017 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0003

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)						
† Overall LMA Rating (Fall Only)										
	** Non-receipt of Summ Reports may effect or									
SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.										
FALL INSPECTIONS: The overall maintena within the attached u			ion and maintenance de nded to be an indiction o							
Comments										

Unit Cover Sheet

Spring 2017 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles
Unit No. 01 Feather River	Right	5.11

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	4/6/2017 - 4/6/2017			
DWR Inspector	Sterling York			
Accompanied By	Steve Beckley			

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Spring 2017

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	04/06/2017 04/06/2017	Sterling York

LM Start		Rating **	Α	Issue No.		4	
LM End		Issue Type +	Ma	Location *		N/A	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item		s & Maintena	nce		0		0
пеш	Manuals				٥		0
DWR ID DWR_MA0003_01_s _ 2013_4							
		Comn	nent Cod	de			
		Inspecto	or Comm	nent			
Sutter Yard has a copy of the O&M manuals.							

No Photos

LM Start		Rating **	A	Issue No.		6	
LM End		Issue Type +	Ma	Location *		N/A	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item Emergence		cy Supplies &			0		0
item	Equipmen	nt			0		0
DWR ID	DWR_MA0	003_01_s _ 201	13_6				
		Comn	nent Cod	de			
		Inspecto	or Comm	ent			

The Sutter Yard has adequate flood fight supplies and equipment.

No Photos

LM Start		Rating **	Α	Issue No.		7	
LM End		Issue Type +	Ma	Location *		N/A	
Category Earthen Levee				GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Flood Pre	paredness &	Training		0		0
пеш					0		0
DWR ID	DWR_MA0	003_01_s _ 201	3_7				
		Comn	nent Cod	le			
		Inspecto	or Comm	ent			
The Sutter	The Sutter Yard has received flood fight training.						

No Photos

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS: Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

Levee Inspection Report By Mile - Spring 2017

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	04/06/2017 04/06/2017	Sterling York

LM Start	0.01	Rating **	М	Issue No.		12
LM End	5.11	Issue Type +	Ma	Location *		WS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Vegetatio	n		38.8979	73°	38.950881 °
пеш	item			-121.617817 °		-121.585758 °
DWR ID	DWR_MA0	003_01_s _ 201	7_12			
		Comn	nent Cod	le		
V1 : Contreasements		rass and wee	ds on th	e levee slo	pes a	and
		Inspecto	or Comm	nent		
Annual grasses need to be maintained, Spring 2017.						



View looking upstream of annual grasses that need to be maintained, Spring 2017.

LM Start	0.01	Rating **	М	Issue No.		11		
LM End	5.11	Issue Type +	Ma	Location *		LS		
Earthen Levee				GPS Latitude/Longitude				
Category				Start		End		
Item	Vegetatio	n		38.8979	73°	38.950881 °		
пеш				-121.617816 °		-121.585758 °		
DWR ID DWR_MA0003_01_s _ 2017_11								
		Comp	nent Coc	10				

Comment Code

V1 : Control annual grass and weeds on the levee slopes and easements.

Inspector Comment

Annual grasses need to be maintained, Spring 2017.

Photo 1 of 1: SP_2017_MA0003_195_11_20170410_00030.jpg



View looking upstream of annual grasses that need to be maintained, Spring 2017.

Levee Inspection Report By Mile - Spring 2017

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	04/06/2017 04/06/2017	Sterling York

LM Start	0.42	Rating **	М	Issue No.		13
LM End	0.42	Issue Type +	Ma	Location *	ation * WS	
Category Earthen Levee			GPS Latitude/Longitude			
Calegory			Start		End	
Item	Animal Co	ontrol		38.90081	1°	38.900811 °
пеш			-121.61160	4 °	-121.611604°	
DWR ID DWR_MA0003_01_s _ 2017_13						

Comment Code

A1: Exterminate rodents and backfill and compact or grout burrows.

Inspector Comment

A large hole on the waterside that look to be from a large animal needs repair, Spring 2017.

Photo 1 of 1: SP_2017_MA0003_195_13_20170410_00032.jpg



View of a large hole on the waterside that look to be from a large animal, Spring 2017.

LM Start	0.69	Rating **	М	Issue No.		17			
LM End	0.69	Issue Type +	Ma	Location *		Location *		LS	
Category	Earthen Levee			GPS Latitude/Longitude					
Calegory				Start		End			
Item	Animal Co	ontrol		38.9033	52°	38.903352	٥		
пеш			-121.6078	29°	-121.607829	0			
DWR ID	D DWR_MA0003_01_s _ 2017_17								

Comment Code

A1: Exterminate rodents and backfill and compact or grout burrows.

Inspector Comment

A large hole on the lanside that look to be from a large animal needs to be repaired, Spring 2017.

Photo 1 of 1: SP 2017 MA0003 195 17 20170410 00033.jpg



View of a large hole on the landside that look to be from a large animal, Spring 2017.

Levee Inspection Report By Mile - Spring 2017

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	04/06/2017 04/06/2017	Sterling York

LM Start	0.78	Rating **	М	Issue No.		140
LM End	0.78	Issue Type +	Ma Location *			LS
Category	Earthen Levee			GPS Latitude/Longitude		
Calegory			Start		End	
Item	Animal Co	ontrol		38.90333	9°	38.903339°
пеш			-121.60620	9°	-121.606209°	
DWR ID	DWR_MA0	003_01_f _ 201	4_140			

Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

There is a rodent hole on the landward toe road approximately 8" in diameter that needs to be repaired. Fall 2016.

LM Start	0.78	Rating **	М	Issue No.	140 (cont)
LM End	0.78	Issue Type +	Ma	Location *	LS

Photo 1 of 2: SP_2017_MA0003_195_140_20170316_00013.jpg



This photo was taken from the landward levee slope near the toe road facing north looking at an approximately 8" rodent hole. Fall 2016.

Photo 2 of 2: SP_2017_MA0003_195_140_20170316_00014.jpg



This is another photo of the rodent hole to show its relationship to to levee toe, toe road, and drainage ditch. Fall 2016.

LM Start	0.80	Rating **	М	Issue No.		21		
LM End	0.80	Issue Type +	Ма	Location *	LS			
Category	Earthen L	evee	GPS Latitude/Longitude					
Calegory				Start		End		
Item	Animal Co	ontrol		38.90327	77°	38.903277 °		
пеш						-121.605864 °		
DWR ID DWR_MA0003_01_f _ 2016_21								

Comment Code

A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

Repair animal hole at landside levee toe. Fall 2016.

Photo 1 of 2: SP_2017_MA0003_195_21_20170316_00011.jpg



View of large hole at the landside levee toe. Look to be cause by a larger animal other than squirrels. Fall 2016.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2017

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	04/06/2017 04/06/2017	Sterling York

LM Start	0.80	Rating **	М	Issue No.		21 (cont)	
LM End	0.80	Issue Type +	Ma	Location *	LS		
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Animal Control 38.9					38.903277 °	
пеш				-121.605864 ° -121.6058			
DWR ID DWR_MA0003_01_f _ 2016_21							
		Comn	nent Cod	le			
A3 : No roo compact o		le, but rodent rows.	burrows	visible; nee	ed to	backfill and	
		Inspecto	or Comm	nent			
Repair animal hole at landside levee toe. Fall 2016.							

Photo 2 of 2 : SP_2017_MA0003_195_21_20170316_00012.jpg

View fron the crown of where this hole is. Fall 2016.

Levee Inspection Report By Mile - Spring 2017

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	04/06/2017 04/06/2017	Sterling York

LM Start	0.81	Rating **	U	Issue No.		141	
LM End	0.81	Issue Type +	Ма	Location *		LS	
Category	Supplemental			GPS Latitude/Longitude			
Calegory			Start		End		
Item	DWR UC	IP LMA Respo	nsibility	38.90326	4 °	38.903264	0
пеш				-121.60569	8°	-121.605698	0
DWR ID							

Comment Code

Inspector Comment

FS_ID:51474 DS_ID:17092 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/11/2017 Water levels were high on WS during inspection so pipe ends could not be inspected. Believe that the sandbags are stil in place and condition of flap gates is unknown. (DWR Sutter Yard- AFreitag)10/10/2016 WS pipe end was underwater for inspecton but the sandbags still appear to be in place. (DWR Sutter Yard - afreitag)4/18/2016 No repairs have been made to the pipe yet. (DWR Sutter Yard - afreitag)5/12/2015 Water level high in WS ditch so could not see WS end of crossing. Do not believe that repairs have been made yet. (DWR Sutter Yard - afreitag)11/17/2014 Same as last inspection. (DWR Sutter Yard - afreitag)5/14/2014 Same as last inspection. (DWR Sutter Yard - afreitag)10/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)5/21/2013 SBFCA project recommends replacing in accordance with title 23. High water levels in WS ditch have pipe ends underwater but repairs have not yet been completed but are planned for when water levels drop. (DWR Sutter Yard - afreitag)10/10/2012 Flap gates not visible on waterward headwall and it appears as though they have been replaced by sandbags. Slide gates on LS appear to be closed yet water leaks excessively from the WS at the sandbagged headwall. (DWR UCIP wwylie)

FIELD_STRUCT_DESC: 1 of 2. 18-inch steel drainage pipe through the levee, 32 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end at concrete headwall. Concrete "U" shaped headwall at the WS toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 143, August 1955 (Station 982+00)].

FS Date: 4/12/2017 9:00:16 AM

Photo 1 of 3: UCIP_SP_2017_51474_64649.jpg



Concrete headwall with walkway and slide gates at LS toe.

Levee Inspection Report By Mile - Spring 2017

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	04/06/2017 04/06/2017	Sterling York

LM Start	0.81	Rating **	U	Issue No.		Issue No.		141 (cont)
LM End	0.81	Issue Type +	Ма	Location *		LS		
Category	Supplemental			GPS Latitude/Longitude				
Calegory			Start		End			
Item	DWR UCI	P LMA Respo	onsibility	38.9032	64°	38.903264°		
пеш				-121.60569	98 °	-121.605698°		
DWR ID								

Comment Code

Inspector Comment

FS_ID:51474 DS_ID:17092 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/11/2017 Water levels were high on WS during inspection so pipe ends could not be inspected. Believe that the sandbags are stil in place and condition of flap gates is unknown. (DWR Sutter Yard- AFreitag)10/10/2016 WS pipe end was underwater for inspecton but the sandbags still appear to be in place. (DWR Sutter Yard - afreitag)4/18/2016 No repairs have been made to the pipe yet. (DWR Sutter Yard - afreitag)5/12/2015 Water level high in WS ditch so could not see WS end of crossing. Do not believe that repairs have been made yet. (DWR Sutter Yard - afreitag)11/17/2014 Same as last inspection. (DWR Sutter Yard - afreitag)5/14/2014 Same as last inspection. (DWR Sutter Yard - afreitag)10/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)5/21/2013 SBFCA project recommends replacing in accordance with title 23. High water levels in WS ditch have pipe ends underwater but repairs have not yet been completed but are planned for when water levels drop. (DWR Sutter Yard - afreitag)10/10/2012 Flap gates not visible on waterward headwall and it appears as though they have been replaced by sandbags. Slide gates on LS appear to be closed yet water leaks excessively from the WS at the sandbagged headwall. (DWR UCIP wwylie)

FIELD_STRUCT_DESC: 1 of 2. 18-inch steel drainage pipe through the levee, 32 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end at concrete headwall. Concrete "U" shaped headwall at the WS toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 143, August 1955 (Station 982+00)].

FS Date: 4/12/2017 9:00:16 AM



Concrete U shaped headwall on WS toe filled in with Sandbags. 16-inch pipe shown over top of headwall.

Levee Inspection Report By Mile - Spring 2017

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	04/06/2017 04/06/2017	Sterling York

LM Start	0.81	Rating **	U	Issue No.		141 (cont)	
LM End	0.81	Issue Type +	Ма	Location *	LS		
Category	Suppleme	ental		GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	P LMA Respo	nsibility	38.90326	4 °	38.903264	
пеш					8 °	-121.605698	
DWR ID							

Comment Code

Inspector Comment

FS_ID:51474 DS_ID:17092 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/11/2017 Water levels were high on WS during inspection so pipe ends could not be inspected. Believe that the sandbags are stil in place and condition of flap gates is unknown. (DWR Sutter Yard- AFreitag)10/10/2016 WS pipe end was underwater for inspecton but the sandbags still appear to be in place. (DWR Sutter Yard - afreitag)4/18/2016 No repairs have been made to the pipe yet. (DWR Sutter Yard - afreitag)5/12/2015 Water level high in WS ditch so could not see WS end of crossing. Do not believe that repairs have been made yet. (DWR Sutter Yard - afreitag)11/17/2014 Same as last inspection. (DWR Sutter Yard - afreitag)5/14/2014 Same as last inspection. (DWR Sutter Yard - afreitag)10/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)5/21/2013 SBFCA project recommends replacing in accordance with title 23. High water levels in WS ditch have pipe ends underwater but repairs have not yet been completed but are planned for when water levels drop. (DWR Sutter Yard - afreitag)10/10/2012 Flap gates not visible on waterward headwall and it appears as though they have been replaced by sandbags. Slide gates on LS appear to be closed yet water leaks excessively from the WS at the sandbagged headwall. (DWR UCIP wwylie)

FIELD_STRUCT_DESC: 1 of 2. 18-inch steel drainage pipe through the levee, 32 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end at concrete headwall. Concrete "U" shaped headwall at the WS toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 143, August 1955 (Station 982+00)].

FS Date: 4/12/2017 9:00:16 AM



Concrete U shaped headwall filled in with sandbags on WS toe. Flap gates appear to be missing and water readily flows through the sandbags from LS.

Levee Inspection Report By Mile - Spring 2017

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	04/06/2017 04/06/2017	Sterling York

LM Start	0.81	Rating **	U	Issue No.		142
LM End	0.81	Issue Type +	Ма	Location *		LS
Category	Supplemental			GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	38.9032	64°	38.903264°
пеш				-121.60569	98 °	-121.605698 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:51475 DS_ID:17136 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/11/2017 Water levels were high on WS during inspection so pipe ends could not be inspected. Believe that the sandbags are stil in place and condition of flap gates is unknown. (DWR Sutter Yard- AFreitag)10/10/2016 WS pipe end was underwater for the inspection but the sandbags appear to still be in place. (DWR Sutter Yard - afreitag)4/18/2016 No repairs have been made to the pipe yet. (DWR Sutter Yard - afreitag)5/12/2015 Watelevel high in WS ditch so could not see WS end of crossing. Do not believe that repairs have been made yet. (DWR Sutter Yard - afreitag)11/17/2014 Same as last inspection. (DWR Sutter Yard - afreitag)5/14/2014 Same as last inspection. (DWR Sutter Yard - afreitag)10/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)5/21/2013 SBFCA project recommends replacing in accordance with title 23. High water levels in WS ditch have pipe ends underwater but repairs have not yet been completed but are planned for when water levels drop. (DWR Sutter Yard - afreitag)10/10/2012 Flap gates not visible on waterward headwall and it appears as though they have been replaced by sandbags. Slide gates on LS appear to be closed yet water leaks excessively from the WS at the sandbagged headwall. (DWR UCIP wwylie)

FIELD_STRUCT_DESC: 2 of 2. 18-inch steel drainage pipe through the levee, 32 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end at concrete headwall. Concrete "U" headwall at the WS toe. [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 143, August 1955 (Station 982+00)].

FS Date: 4/12/2017 9:05:05 AM

Photo 1 of 3: UCIP_SP_2017_51475_64662.jpg



Concrete headwall, slidegates, and metal walkway on LS toe.

Levee Inspection Report By Mile - Spring 2017

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	04/06/2017 04/06/2017	Sterling York

LM Start	0.81	Rating **	U	Issue No.		Issue No.		142 (cont)
LM End	0.81	Issue Type +	Ma	Location *		LS		
Category	Suppleme	ental GPS Latitude			le/Longitude			
Calegory				Start		End		
Item	DWR UC	IP LMA Respo	onsibility	38.9032	64 °	38.903264°		
пеш					98 °	-121.605698°		
DWR ID								

Comment Code

Inspector Comment

FS_ID:51475 DS_ID:17136 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

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FS Date: 4/12/2017 9:05:05 AM



Concrete U shaped headwall on WS toe filled with sandbags.

Levee Inspection Report By Mile - Spring 2017

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	04/06/2017 04/06/2017	Sterling York

LM Start	0.81	Rating **	U	Issue No.		142 (cont)
LM End	0.81	Issue Type +	Ма	Location *		LS
Category Supplemental GF		GPS Lat	ituc	le/Longitude		
Calegory				Start		End
Item	DWR UC	IP LMA Respo	onsibility	38.90326	4 °	38.903264 °
пеш				-121.60569	8 °	-121.605698 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:51475 DS_ID:17136 EP_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/11/2017 Water levels were high on WS during inspection so pipe ends could not be inspected. Believe that the sandbags are stil in place and condition of flap gates is unknown. (DWR Sutter Yard- AFreitag)10/10/2016 WS pipe end was underwater for the inspection but the sandbags appear to still be in place. (DWR Sutter Yard - afreitag)4/18/2016 No repairs have been made to the pipe yet. (DWR Sutter Yard - afreitag)5/12/2015 Watelevel high in WS ditch so could not see WS end of crossing. Do not believe that repairs have been made yet. (DWR Sutter Yard - afreitag)11/17/2014 Same as last inspection. (DWR Sutter Yard - afreitag)5/14/2014 Same as last inspection. (DWR Sutter Yard - afreitag)10/30/2013 Same as last inspection. (DWR Sutter Yard - afreitag)5/21/2013 SBFCA project recommends replacing in accordance with title 23. High water levels in WS ditch have pipe ends underwater but repairs have not yet been completed but are planned for when water levels drop. (DWR Sutter Yard - afreitag)10/10/2012 Flap gates not visible on waterward headwall and it appears as though they have been replaced by sandbags. Slide gates on LS appear to be closed yet water leaks excessively from the WS at the sandbagged headwall. (DWR UCIP wwylie)

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FS Date: 4/12/2017 9:05:05 AM



Flap gates appear to be missing from U shaped headwall. Sandbags fill headwall but water flows heavily from LS.

Levee Inspection Report By Mile - Spring 2017

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	04/06/2017 04/06/2017	Sterling York

LM Start	1.77	Rating **	A/W	Issue No.		14		
LM End	1.77	Issue Type +	Ма	Location *		LS		
Category	Earthen Levee			GPS La	titud	le/Longitude		
Calegory				Start		End		
Item	Animal Co	ontrol		38.9070	25 °	38.907025 °		
пеш				-121.5903	75 °	-121.590375°		
DWR ID DWR_MA0003_01_s _ 2015_14								
		Comn	nent Cod	le				
A3 : No roo compact o		le, but rodent rows.	burrows	visible; nee	ed to	backfill and		
		Inspecto	or Comm	nent				
Rodent holes have been backfilled and no new evedence of activity. Fall 2016.								



Rodent holes were backfilled and no longer exist at this location. Fall 2016.

Levee Inspection Report By Mile - Spring 2017

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	04/06/2017 04/06/2017	Sterling York

LM Start	2.17	Rating **	U	Issue No.		143	
LM End	2.17	Issue Type +	En	Location *		LS	
Category	Suppleme	upplemental			GPS Latitude/Longitude		
Calegory				Start		End	
Item	DWR UC	IP Field Study		38.91173	34°	38.911734°	
пеш				-121.58610	06°	-121.586106 °	
DWR ID							

Comment Code

Inspector Comment

FS_ID:51477 DS_ID:17088 EP_NO: 3284 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/11/2017 There was a cavity collapse above the pipe alignment on the WS slope during January 2017 high water event. Cavity was filled with rock to prevent further levee damage during the high water season. Further inspection will be needed on this crossing to determine the cause of the collapse. Recommend having an internal camera inspection done. Erosion happening around the WS concrete vault. (DWR Sutter Yard- AFreitag)10/10/2016 LS pipe end was mostly submerged so could not verify the connectivity between the LS headwall and WS vault. BLackberries and still overgrown on WS.(DWR Sutter Yard - afreitag)4/18/2016 WS vault is being overgrown with blackberries. They should be sprayed and cleared back. No other problems were noticeable with this crossing.5/12/2015 Only the right flapgate appeared to be abandoned. The left and middle flap gates were flowing water during the last inspection.11/17/2014 Same as last inspection.5/14/2014 Same as last inspection.10/30/2013 Same as last inspection.5/21/2013 Pumping plant was running and filling concrete vault on WS toe through the left flap gate and then flowing through levee pipe and filling irrigation ditch on LS. Left and middle flap gates appear to be connected to pumps and right gate appears abandoned. Recommend contacting owner to get more details.10/10/2012 Pumping plant has been disconnected from levee. Need to determine if abandonment is appropriate or if this is now a gravity drain with flap gate.

FIELD_STRUCT_DESC: 32-inch by 32-inch reinforced concrete irrigation culvert through the levee, approximately 28 feet below the crown. Transition between vault on the waterside (WS) and box culvert within levee section is made with a 41-inch corrugated metal pipe (CMP). Slide gate located on the landside (LS) at concrete headwall. Flap gate in concrete vault on the WS at terminal of pipes from pump structure in floodway. Pipes from pump station, located on the WS, are no longer connected. (Permit No. 3284, 1960 - Richards) [Additional Reference(s): DWR Levee Log, 2005]. FS Date: 4/12/2017 9:06:41 AM



32X32 box culvert on LS toe in Concrete U shaped channel with slide gate.

Levee Inspection Report By Mile - Spring 2017

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	04/06/2017 04/06/2017	Sterling York

LM Start	2.17	Rating **	U	Issue No.		143 (cont)
LM End	2.17	Issue Type +	En	Location *		LS
Category	Suppleme	ental		GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UC	IP Field Study		38.91173	4 °	38.911734
пеш				-121.58610	3°	-121.586106
DWR ID						

Inspector Comment

Comment Code

FS_ID:51477 DS_ID:17088 EP_NO: 3284 Repair Type: Urgent Crossing Status: Found

UCIP Comments: 4/11/2017 There was a cavity collapse above the pipe alignment on the WS slope during January 2017 high water event. Cavity was filled with rock to prevent further levee damage during the high water season. Further inspection will be needed on this crossing to determine the cause of the collapse. Recommend having an internal camera inspection done. Erosion happening around the WS concrete vault. (DWR Sutter Yard- AFreitag)10/10/2016 LS pipe end was mostly submerged so could not verify the connectivity between the LS headwall and WS vault. BLackberries and still overgrown on WS.(DWR Sutter Yard - afreitag)4/18/2016 WS vault is being overgrown with blackberries. They should be sprayed and cleared back. No other problems were noticeable with this crossing.5/12/2015 Only the right flapgate appeared to be abandoned. The left and middle flap gates were flowing water during the last inspection.11/17/2014 Same as last inspection.5/14/2014 Same as last inspection.10/30/2013 Same as last inspection.5/21/2013 Pumping plant was running and filling concrete vault on WS toe through the left flap gate and then flowing through levee pipe and filling irrigation ditch on LS. Left and middle flap gates appear to be connected to pumps and right gate appears abandoned. Recommend contacting owner to get more details.10/10/2012 Pumping plant has been disconnected from levee. Need to determine if abandonment is appropriate or if this is now a gravity drain with flap gate.

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Photo 2 of 3: UCIP_SP_2017_51477_64667.jpg



8-foot X 14-foot concrete box on WS toe with slide gate and 3 abandoned flap gates.

Levee Inspection Report By Mile - Spring 2017

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	04/06/2017 04/06/2017	Sterling York

LM Start	2.17	Rating **	U	Issue No.		143 (cont)
LM End	2.17	Issue Type +	En	Location *		LS
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		38.91173	4 °	38.911734°
пеш				-121.58610	6°	-121.586106 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:51477 DS_ID:17088 EP_NO: 3284 Repair Type: Urgent Crossing Status: Found

FS Date: 4/12/2017 9:06:41 AM

UCIP Comments: 4/11/2017 There was a cavity collapse above the pipe alignment on the WS slope during January 2017 high water event. Cavity was filled with rock to prevent further levee damage during the high water season. Further inspection will be needed on this crossing to determine the cause of the collapse. Recommend having an internal camera inspection done. Erosion happening around the WS concrete vault. (DWR Sutter Yard- AFreitag)10/10/2016 LS pipe end was mostly submerged so could not verify the connectivity between the LS headwall and WS vault. BLackberries and still overgrown on WS.(DWR Sutter Yard - afreitag)4/18/2016 WS vault is being overgrown with blackberries. They should be sprayed and cleared back. No other problems were noticeable with this crossing.5/12/2015 Only the right flapgate appeared to be abandoned. The left and middle flap gates were flowing water during the last inspection.11/17/2014 Same as last inspection.5/14/2014 Same as last inspection.10/30/2013 Same as last inspection.5/21/2013 Pumping plant was running and filling concrete vault on WS toe through the left flap gate and then flowing through levee pipe and filling irrigation ditch on LS. Left and middle flap gates appear to be connected to pumps and right gate appears abandoned. Recommend contacting owner to get more details.10/10/2012 Pumping plant has been disconnected from levee. Need to determine if abandonment is appropriate or if this is now a gravity drain with flap gate.

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Pumping plant on WS toe at small slough. Pipes no longer connected to concrete box on WS toe.

Levee Inspection Report By Mile - Spring 2017

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	04/06/2017 04/06/2017	Sterling York

LM Start	2.18	Rating **	М	Issue No.		15
LM End	2.18	Issue Type +	Ма	Location *		WS
Category	evee	GPS Lat	ituc	le/Longitude		
Calegory				Start		End
Item	Trim / Thi	n Trees		38.91186	9°	38.911869°
пеш				-121.58609	3°	-121.586093 °
DWR ID DWR_MA0003_01_s _ 2015_15						

Comment Code

T1: Trim trees to at least five feet above ground level.

Inspector Comment

Tree is at a turnout and not in the levee, but limbs should be trimmed for access and visibility.

Photo 1 of 1: SP_2017_MA0003_195_15_20170316_00006.jpg



View of tree at a turnout that needs to have it limbs trimmed for visibility and access, landside looking downstream. Fall 2016.

LM Start	2.18	Rating **	A/W	Issue No.		18	
LM End	2.18	Issue Type +	Ma	Location *		LS	
Earthen Levee				GPS Latitude/Longitude			
Category				Start End			
Item	Animal Co	ontrol		38.9118	69°	38.911869°	
пеш		-121.586093 ° -121.5860					
DWR ID DWR_MA0003_01_s _ 2015_18							

Comment Code

A3: No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comment

Photo 1 of 1: SP 2017 MA0003 195 18 20170316 00008.jpg



View of rodent holes that need to be backfilled, No evidence of rodents during inspection. Fall 2016.

LM Start	2.19	Rating **	С	Issue No.		19	
LM End	2.24	Issue Type +	En	Location *		LS	
Category	Earthen L	.evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Encroach	ments		38.9120	02 °	38.912653	٥
пеш				-121.5859	35 °	-121.585457	0
DWR ID	DWR_MAG	003_01_f _ 201	6_19				
		Comn	nent Cod	le			

PR: Prunings

Inspector Comment

Pruning's need to be removed. Fall 2016.

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2017

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	04/06/2017 04/06/2017	Sterling York

-								
LM Start	3.20	Rating **	A/W	Issue No.		20		
LM End	3.20	Issue Type +	Ма	Location *		LS		
Category	Earthen L	evee		GPS La	atitud	e/Longitude		
Category				Start		End		
Item	Slope Sta	bility		38.9259	09°	38.925909°		
пеш				-121.5854	01°	-121.585401 °		
DWR ID	DWR_MA0	003_01_s _ 201	5_20					
		Comn	nent Cod	de				
S1 : Repai	ir slope ins	tability.						
		Inspecto	or Comm	nent				



View of the inconsistent slope that makes the crown narrower were it dips in and out, but no evidence of slope erosion or sloughing. Fall 2016.

LM Otant	3.48	Rating **	М	Issue No.		22	
LM Start	3.40	Rating	IVI	issue ivo.		22	
LM End	3.48	Issue Type +	En	Location *	LS		
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Category				Start		End	
Item	Encroach	ments		38.9291	28°	38.929128°	
Rem	ileiii -				12 °	-121.588412 °	
DWR ID	DWR_MA0	003_01_s _ 201	7_22				
		Comn	nent Cod	le			
PR : Pruni	ngs						
		Inspecto	or Comm	nent			
Pruning's r	need to be	removed fron	n landsic	le slope, Sp	oring	2017.	



View looking upstream of pruning's that need to be removed from landside slope, Spring 2017.

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

Levee Inspection Report By Mile - Spring 2017

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	04/06/2017 04/06/2017	Sterling York

LM Start	3.78	Rating **	М	Issue No.		144
LM End	3.78	Issue Type +	En	Location *		LS
Supplemental				GPS Latitude/Longitude		
Calegory				Start		End
Item	DWR UCI	P Field Study		38.93248	32 °	38.932482 °
пеш				-121.5910)5 °	-121.591005 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:51481 DS_ID:17087 EP_NO: 1730

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/11/2017 Big dig out/depression still present at the LS toe. Pipe is set to be replaced during the SBFCA project so depression should be repaired then. (DWR Sutter Yard-AFreitag)10/10/2016 Depression is still present at the LS toe but appears that it was dug out on purpose.(DWR Sutter Yard -afreitag)4/18/2016 Big depression on LS toe along the pipe alignment. 5/12/2015 Crossing appears to be in good condition. No noticeable issues to report.11/17/2014 Same as last inspection.5/14/2014 Same as last inspection.10/30/2013 Same as last inspection.5/21/2013 SBFCA project recommends replacing in accordance with title 23. Same as last inspection.
FIELD_STRUCT_DESC: 12-inch steel asphalt coated irrigation pipe through the levee, 4.5 feet below the crown. Gate valve and pump

through the levee, 4.5 feet below the crown. Gate valve and pump located on the waterside (WS). 24-inch concrete standpipe located on the landside (LS) toe has been degraded to ground elevation and filled in with soil. Pipe remains intact. Steel tower over pump is located on the WS. (Permit No. 1730, 1959 - Robert L. Crandall). [Additional Reference(s): DWR Levee Log, 2005].

FS Date: 4/12/2017 9:16:41 AM

LM Start	3.78	Rating **	M	Issue No.	144 (cont)
I M End	3.78	Issue Type +	Fn	Location *	LS

Photo 1 of 3: UCIP_SP_2017_51481_64672.jpg



Pipe, pump, and tower on WS slope/toe.

Photo 2 of 3: UCIP_SP_2017_51481_64671.jpg



Pipe at LS shoulder showing exposed concrete cutoff wall.

Levee Inspection Report By Mile - Spring 2017

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	04/06/2017 04/06/2017	Sterling York

LM Start	3.78	Rating **	М	Issue No.		144 (cont)
LM End	3.78	Issue Type +	En	Location *	LS	
Category	Suppleme	ental		GPS La	titud	e/Longitude
Calegory				Start		End
Item	DWR UC	IP Field Study		38.93248	32 °	38.932482 °
пеш				-121.59100	05 °	-121.591005 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:51481 DS_ID:17087 EP_NO: 1730

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: 4/11/2017 Big dig out/depression still present at the LS toe. Pipe is set to be replaced during the SBFCA project so depression should be repaired then. (DWR Sutter Yard-AFreitag)10/10/2016 Depression is still present at the LS toe but appears that it was dug out on purpose.(DWR Sutter Yard-afreitag)4/18/2016 Big depression on LS toe along the pipe alignment. 5/12/2015 Crossing appears to be in good condition. No noticeable issues to report.11/17/2014 Same as last inspection.5/14/2014 Same as last inspection.10/30/2013 Same as last inspection.5/21/2013 SBFCA project recommends replacing in accordance with title 23. Same as last inspection.

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FS Date: 4/12/2017 9:16:41 AM



Pump at WS toe with tower over top and concrete U shaped headwall.

LM Start	4.15	Rating **	М	Issue No.		1
LM End	4.18	Issue Type +	Ма	Location *	WS	
Category Supplemental				GPS La	atitud	le/Longitude
				Start		End
Item		ACE Erosion S	Survey,	38.9374	51 °	38.937937 °
пеш	DRAFT			-121.5885	12 °	-121.588471 °
DWR ID DWR_MA0003_01_s _ 2016_1						
Comment Code						

Inspector Comment

2013 - Minor toe scour causing gradual erosion of bank slope. Site is within ecological reserve. 2015: Last observed in 2013. [2015 Site ID: FHR_12-3_R]

Photo 1 of 2: SP_2017_MA0003_195_1_20170316_00001.jpg



USACE 2013 Photo #1

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Levee Inspection Report By Mile - Spring 2017

Sutter Maintenance Yard Maintenance Area 0003

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	5.11	04/06/2017 04/06/2017	Sterling York

LM Start	4.15	Rating **	М	Issue No.		1 (cont)
LM End	4.18	Issue Type +	Ma	Location *		WS
Category	Supplemental				atitud	le/Longitude
Calegory				Start		End
Item		CE Erosion S	Survey,	38.9374	51 °	38.937937 °
пеш	DRAFT			-121.5885	12 °	-121.588471 °
DWR ID	DWR_MA0	003_01_s _ 201	6_1			

Inspector Comment

Comment Code

2013 - Minor toe scour causing gradual erosion of bank slope. Site is within ecological reserve. 2015: Last observed in 2013. [2015 Site ID: FHR_12-3_R]



USACE 2013 Photo #2

LM Start	4.71	Rating **	М	Issue No.		2	
LM End	4.76	Issue Type +	Ma	Location *		WS	
Category	Supplemental			GPS Latitude/Longitud			
Calegory		Start		End			
Item		2015 USACE Erosion Survey,			88°	38.945958	0
iteiii	DRAFT			-121.5860	96°	-121.586394	0
DWR ID	DWR_MA0	003_01_s _ 201	6_2				

Inspector Comment

Comment Code

2013 - Minor toe scour causing gradual erosion into the bank slope. 2015: Last observed in 2013. [2015 Site ID: FHR_12-8_R]

LM Start	4.71	Rating **	М	Issue No.	2 (cont)
LM End	4 76	Issue Type +	Ma	Location *	WS

Photo 1 of 2: SP_2017_MA0003_195_2_20170316_00003.jpg



USACE 2013 Photo #1

Photo 2 of 2: SP_2017_MA0003_195_2_20170316_00004.jpg



USACE 2013 Photo #2

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement